ONLY

ADMIN RECORD

RFPF 1000 01 (5/95)
Formerly RF 47940
Page 1 of 1

Document Modification Request

Print or Type all information (except signatures) Process procedures in accordance with 1-A01-PROC DEV 400, Procedure Process.

25 DMR No: 96-DMR-ERM-0001

1 Name/Phone/Pager/Location: J Bray / 6698 / 6143 / T893B	2 Date: 1/8/96
3 Existing Document Number and Revision: RF/ER-95-0107 Revision #5	4 Document Type ☐ Procedure ☒ Plan ☐ Other
5 Document Title: Sampling and Analysis Plan for the Remediation of Ryan's Pit, OU2 dated August 28, 1995	

6 Item	7 Page	8 Step	9 Proposed Modification
#1 App B 2.3.1	pg 4	#4	Delete the word "portable" from the sentence "Samples will be analyzed with a portable GC."

10 Item	10a. Justification (reason for modification, EJO #, TP #, etc.)
#1	The use of a portable GC is not necessary, since the performance values have changed from a "percentage of removal" to actual cleanup levels. Use of onsite GC will be conducted and will provide equal to or greater quality than the portable GC.

Originator Signature: R Z. Hawk / Richard L. Hawk 08JAN96 (print/sign/date)

11 ☐ Process ☐ Do not Process (state reason in Block 10a)

12. ☐ Process (Complete Blocks 13-22) ☐ Do not Process (state reason in Block 10a) (print/sign/date) R Z Hawk / Richard L. Hawk

13 New Document/ Rev No (If new or changed)

Complete either Section 14a. or 14b as applicable. For procedures, attach completed Procedure Modification Worksheet from 1 A01 PROC DEV-400

14a Type of Complete Modification: ☐ New ☐ Revision ☐ One-Time-Use ☐ Cancellation

14b Changes (check all that apply): ☐ Intent Change ☐ Editorial Correction ☒ Nonintent Change ☒ Regular ☐ Interim Approval Requested Needed for Immediate Use (14-day limit for obtaining final approval)

Additional Attributes: ☐ Temporary ☐ One-Time-Use ☐ Limited Distribution

15 ERM Change Control Board Required ☐ Yes ☐ No (Applicable only to new procedures, revisions and intent changes.)

List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1 A01-PROC DEV 400) enter the name of the reviewer followed by /s/ in block 17. If the reviewer indicates *No comments*, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.

16 Organization	17 Reviewer/Concurror	18 Date	16a. Organization	17a. Reviewer/ Concurror	18a. Date
QA	M Prochazka	1/8/96			
Anal. Actions	R Z Hawk Richard L. Hawk	08JAN96			

19 Assigned SME/Phone/Pager/Location: JR Bray / 6698 / 6143 / T893B

20 Cost Center: 0203

21 Charge Number: 98804?-00

22. Requested Completion Date: 1/15/96

23. Prescreen/Screen/USQD Number:

24 Independent Safety Review Meeting and Date:

26 After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New procedures or Revisions): R Z HAWK / Richard L. Hawk 09JAN96

DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

27 Effective Date: 1/15/96

28. Expiration Date (If applicable):

3) After completion of the excavation, samples will be collected to aid in determining if soil can be placed back into the trench after processing Therefore, samples for metals and radionuclides will be collected after excavation, and before processing so that the data can be received early for prompt evaluation The decision for metals and radionuclide containing soils to be returned to Ryan's pit after processing will be based on average radionuclide content being below the PPRGs listed in *Programmatic Risk Based Preliminary Remediation Goals,* USDOE February 1995 and the average TCLP concentration being below the limits for metals defined in 6 CCR 1007-3, Section 261 24

Data types One composite sample made up of at least 5 subsamples will be collected from each, (up to 10) roll-off containers containing Ryan's pit soils These subsamples will be collected in a systematic manner, and will be used to determine average metals and radionuclide content within the soil The samples will be analyzed for radionuclides, and TCLP metals as described in Table 2 3-1 of Appendix B and Table 3 2 of the SAP

4) Two questions will be answered relating to treatment of the VOC contaminated soils

1) What is the removal efficiency or percent reduction of the organic contaminants?
2) Are the VOC performance standards being met on the treated soil?

Data types Samples will be collected from every batch of soil, before and after treatment The batch size is expected to be 3-5 cubic yards The samples will be collected from approximately five subsample grabs as the soil is being loaded into the thermal desorption unit Samples will be analyzed with a GC Corresponding samples will be collected from the batch after processing (post processing samples) and analyzed in the same manner The analyses will allow project personnel to determine removal efficiency of treated soils In addition, approximately every 10 batches, a confirmatory triplicate sample will be collected and analyzed in an offsite laboratory for VOCs (in addition to a regular and duplicate sample for onsite GC analysis) These samples will allow for an evaluation that performance goals, as stated in the PAM/Permit Modification for the treatment unit, have been attained After processing, the distribution of residual VOCs is expected to be homogenous thus allowing for the variation in sampling frequency from the metals and radionuclide sampling scheme

Design Optimization. The optimum number of samples required to meet the decision errors specified for the documentation of residual contamination remaining at the boundaries of the trench excavation are given in Table 2 3-2 The number of samples given probably represents confidences slightly higher those specified due to the statistical assumption of simple random sampling, while the actual sampling strategy consists of one biased toward historical knowledge, and therefore more probability of intersecting relatively higher volumes of contamination The table also presents design parameters used in the Decision Error Feasibility Trials (DEFT), Version 4 0 (9/94) software by EPA

The table consists of the most conservative (most protective of human health and environment) scenario with respect to the VOC volatile organic compounds, i e , the lowest applicable PPRG, which is 5440 mg/kg for trichlorethene (TCE, construction worker in subsoil scenario) Comparisons of average real sample results with PPRGs must be made for each chemical of concern

96 OMR ERM - 0001